STATISTICAL BRIEF

SERIES

Goods Movement Within the U.S. Supply Chain

Pharmaceuticals Profile[1]

August 2024

Pharmaceuticals are vital to U.S. public health. Understanding how they move through the nation's transportation system helps mitigate supply chain disruptions and ensures patients receive essential medications when and where they need them. This profile analyzes where pharmaceuticals originate, where they are delivered, and the modes of transport used throughout the supply chain.

ORIGINS (STARTING LOCATIONS)

In 2023, 2,905 pharmaceutical and medicine manufacturing establishments in the United States employed 321,000 people, with a total annual payroll of $36.5 billion [Census 2023].

In 2024, the following states were the top U.S. origins[2] of pharmaceutical products in terms of value: California ($196.9 billion), Illinois ($152.7 billion), and Pennsylvania ($133.1 billion) [BTS, FHWA 2024].[3]

In addition to producing pharmaceuticals domestically, the United States imported $213 billion worth of pharmaceuticals in 2025. Air transport accounted for 79 percent of these imports ($168.4 billion), water for 12 percent ($26.9 billion), and other modes for 9 percent ($18.7 billion). In terms of shipping weight, water transported six times as many pharmaceutical products as air (560,000 short tons for water and 92,000 short tons for air). Vessel imports were containerized [Census 2025].

Across modes, the top import origins for pharmaceuticals were Ireland ($42.4 billion), Germany ($26.1 billion), and Switzerland ($19 billion) in 2025. Considering just imports transported via water, the top origins for pharmaceuticals were India ($6.2 billion), Ireland ($4.5 billion), and Belgium ($3.6 billion) [Census 2025].

From Canada, $3.75 billion in pharmaceutical products were imported in 2025, with 92 percent transported by truck. From Mexico, $1 billion in pharmaceutical products were imported, with 88 percent transported by truck [BTS 2025].

U.S. Department of Transportation
Office of the Secretary of Transportation

Bureau of Transportation Statistics
1200 New Jersey Avenue
Washington, DC 20590

https://www.bts.gov/browse-statistical-products-and-data

[1] By Patricia DiJoseph, PhD

[2] Origins include production centers, wholsalers, and distribution centers.

[3] These values are based on the following Freight Analysis Framework selections: Flow Type: Total Flows, Year: 2024, Measure: value, Forecast Scenarios: n/a, Domestic Origin: state, Domestic Destination: n/a, Commodity: 21 – Pharmaceuticals, Domestic Mode: n/a, Distance Band: n/a.

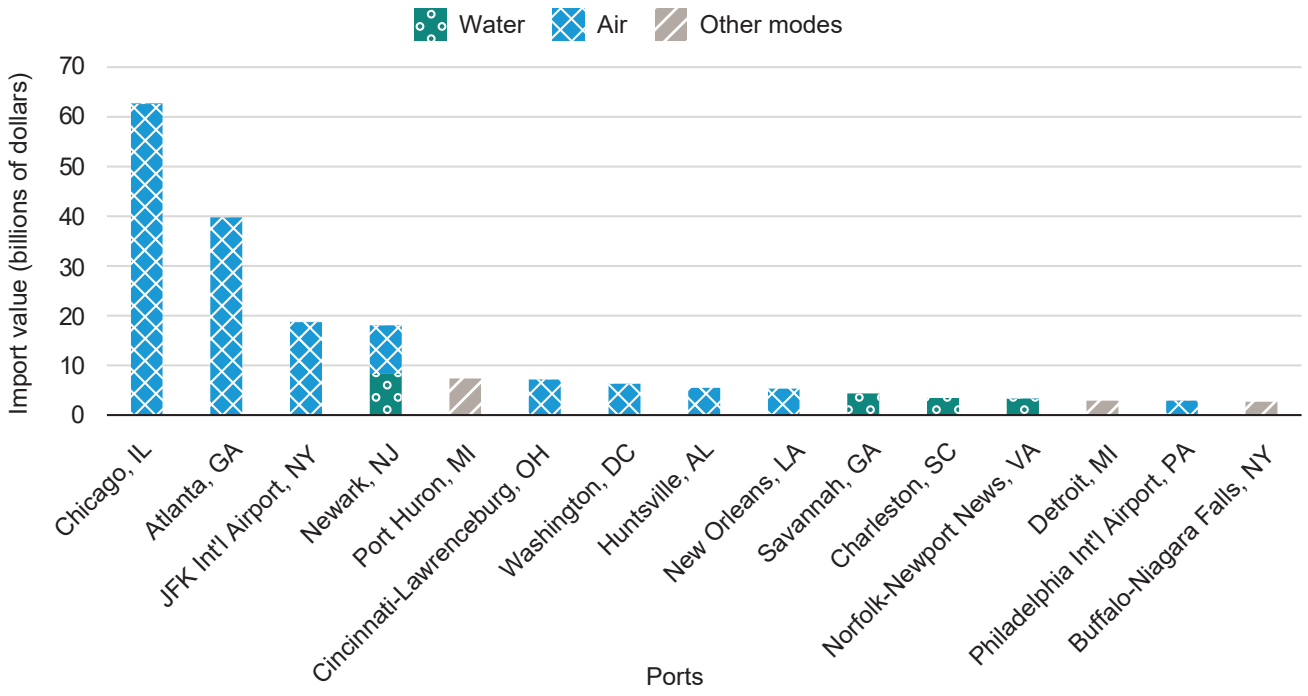
In 2025, the top ports of entry for pharmaceutical imports were Chicago, IL; Atlanta, GA; and JFK International Airport, NY. Imports via these ports were all by air. The top ports of entry via water were Newark, NJ; Savannah, GA; and Charleston, SC (Figure 1) [Census 2025]. The top 15 ports of entry are concentrated east of the Mississippi River. Localized supply chain disruptions, such as to the New York–New Jersey area; Chicago, IL; or the southeast United States, including Atlanta, GA, would have a significant impact on pharmaceutical imports.

DESTINATIONS

The United States purchased $1.5 trillion of pharmaceuticals in 2024. The top destinations by value were California ($151.8 billion), Texas ($103.7 billion), and Pennsylvania ($102.3 billion). The top destinations by tonnage were Florida (4.6 million tons), Texas (3.7 million tons), and Georgia (3.1 million tons) [BTS, FHWA 2024]. The destination rankings align closely with the states' population rankings.

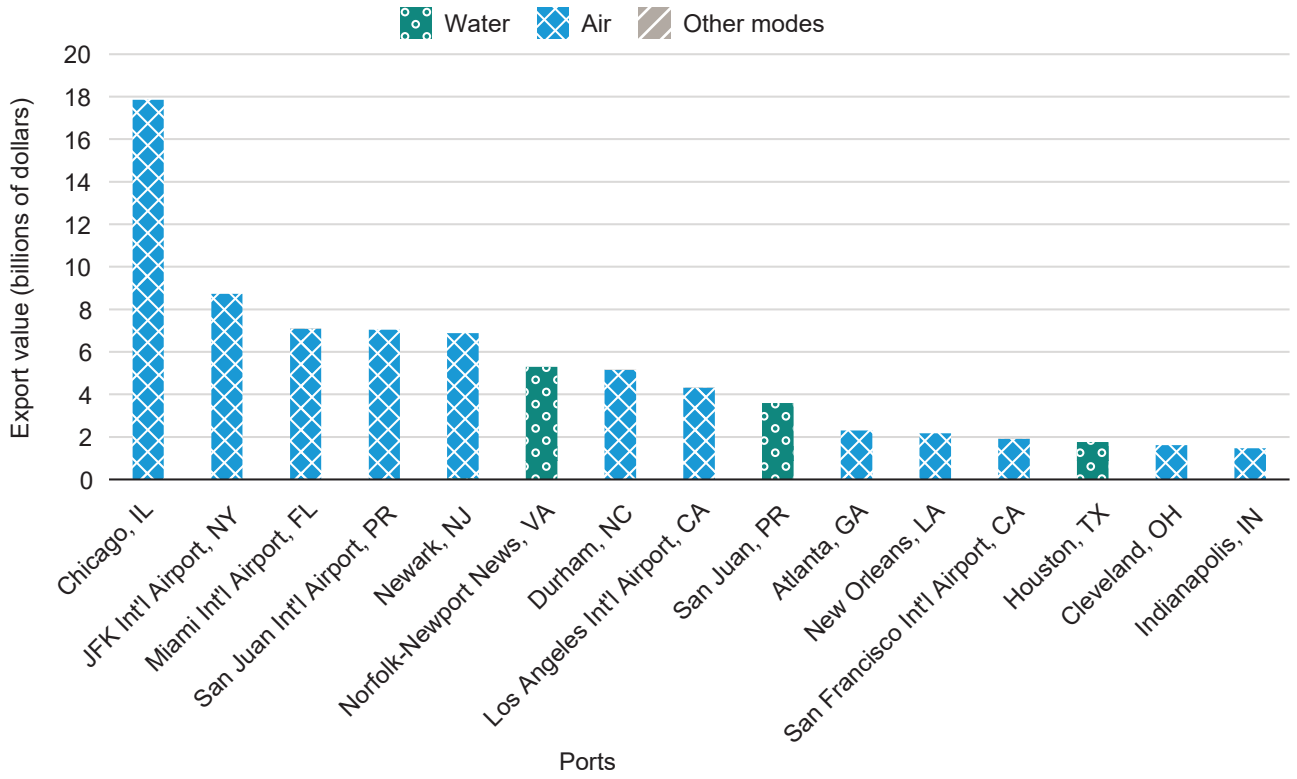
Pharmaceuticals produced in the United States also have foreign destinations. The United States exported $97.8 billion in pharmaceuticals in 2025. The top exit ports were Chicago, IL ($17.9 billion), JFK International Airport, NY ($8.7 billion), and Miami International Airport, FL ($7.1 billion), and the mode for these ports was exclusively by air (Figure 2). The top ports of exit, by water transport, were Norfolk-Newport News, VA ($5.3 billion); San Juan, PR ($3.6 billion); and Houston, TX ($1.8 billion) [Census 2025].

Figure 1. Value of Pharmaceutical Imports for the Top 15 U.S. Ports by Mode, 2025



Source: BTS, data from Census 2025.

Figure 2. Value of Pharmaceutical Exports for the Top 15 U.S. Ports by Mode, 2025

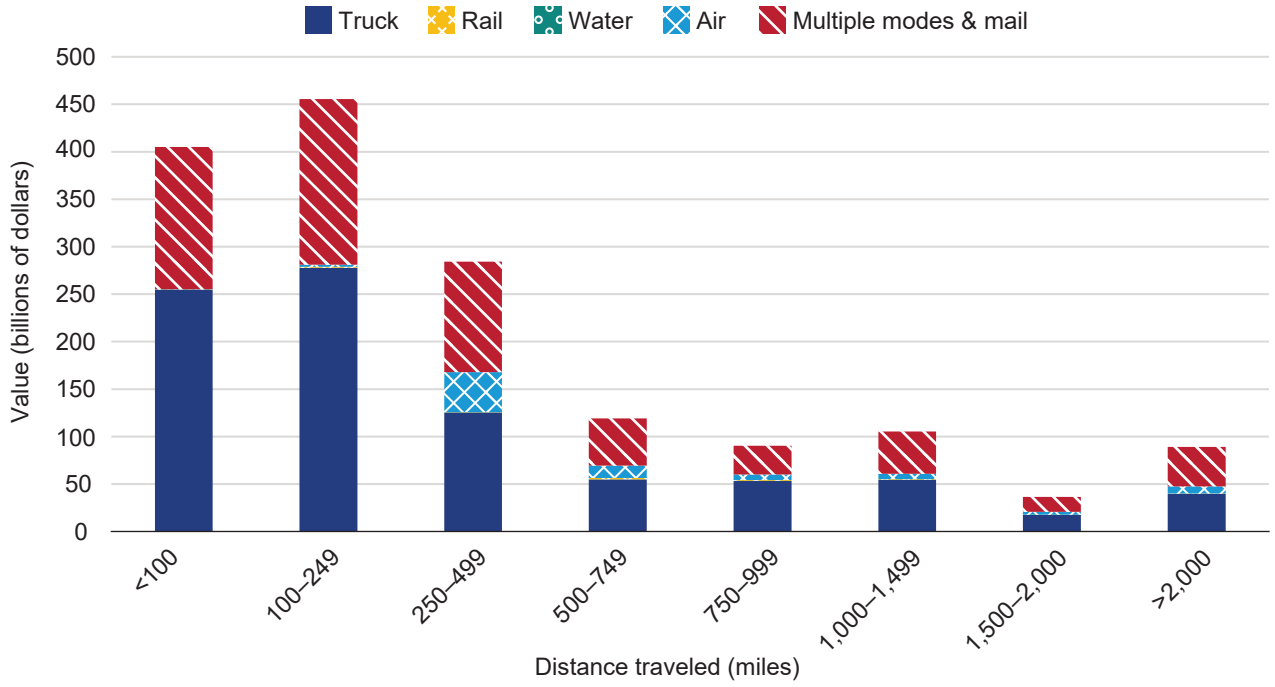


Source: BTS, data from Census 2025.

TRANSPORT MODES WITHIN THE UNITED STATES

Pharmaceuticals were transported within the United States in 2024 by truck ($877.5 billion, 15.2 billion ton-miles), followed closely by multiple modes and mail ($622.9 billion, 1.3 billion ton-miles), air ($79.1 billion, 244.5 million ton-miles), rail ($4.9 billion, 1.3 billion ton-miles), water ($853 million, 430.8 million ton-miles), and other and unknown ($28.3 million, 0.5 million ton-miles) The amount moved by rail and water within the United States is negligible. The most common transport distance was between 100 and 249 miles [BTS, FHWA 2025]. Figure 3 shows the mode of transport by distance band.

Figure 3. Pharmaceuticals Movement by Distance Transported and Mode of Transport: 2024



Source: BTS, data from BTS, FHWA 2025.

REFERENCES

BTS. 2025. *TransBorder Freight Program Data Dashboard*. Washington, DC: Bureau of Transportation Statistics. https://data.bts.gov/stories/s/TransBorder-Freight-Data/myhq-rm6q/. Last accessed June 29, 2026.

BTS and FHWA. *2025. Freight Analysis Framework, FAF5, Version 5.7.1*. Washington, DC: Bureau of Transportation Statistics. https://faf.ornl.gov/faf5/dtt_total.aspx. Last accessed June 29, 2026.

Census. 2023. "Economic Surveys CB2300CBP." *32541 Pharmaceutical and medicine manufacturing*. Washington, DC: U.S. Census Bureau. https://data.census.gov/table/CBP2023.CB2300CBP?g=010XX00US&y=2023&codeset=naics~32541. Last accessed May 20, 2026.

———2025. *USA Trade Online*. Washington, DC: U.S. Census Bureau. https://usatrade.census.gov/. Last accessed July 1, 2026.

Citation
United States Department of Transportation, Bureau of Transportation Statistics. *Goods Movement Within the U.S. Supply Chain: Pharmaceuticals Profile*. Washington, DC: 2026. https://doi.org/10.21949/xhaw-am91.

Quality Assurance Statement
The Bureau of Transportation Statistics (BTS) provides high quality information to serve government, industry, and the public in a manner that promotes public understanding. Standards and policies are used to ensure and maximize the quality, objectivity, utility, and integrity of its information. BTS reviews quality issues on a regular basis and adjusts its programs and processes to ensure continuous quality improvement.

More BTS Publications
To access more publications and statistical products from BTS, visit www.bts.gov/browse-statistical-products-and-data.